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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGO, TANYA T

ART UNIT

PAPER NUMBER

2613

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,508	Applicant(s) MEYER ET AL.	
	Examiner TANYA NGO	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 16, 17 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) 14, 15, 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13, 16, 17 and 20-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings were received on 12/18/2009. These drawings are acceptable.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re claim 13, the applicant claims "the transmitter search unit for carrying out transmitting frequency search over all receivable frequencies within the predetermined frequency ranges stored in the memory". However, the applicant discloses that "an automatic transmitter search is automatically affected for the frequency ranges stored in the memory" ¶ [0016], and such that the transmitter search is affected for the entire frequency ranges stored in memory which are predetermined, whether or not they are receivable.

Response to Arguments

4. Applicant's arguments with respect to claim 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al (herein Burke) US PG PUB 2004/0127180 and Volkel US Patent 6,134,426.

Claim 13 Burke discloses an infrared headphone/hearing aid comprising:

a receiver for receiving signals (*radio frequency RF detector designed to measure the signals paragraph [0028] in order to measure the signals it must receive the signals*);

a memory for storing predetermined frequency ranges within which a transmitter search is to be performed (*a memory device linked to the micro-controller 19 store the range of frequencies. the microcontroller will output a spectrum detection range, which is input into a filter and amplifier that ensure that only those spectrum ranges are passed to the sweep oscillator 32, paragraph [0035], which is then used to by the unit to scan for the frequencies within the range, Fig. 3, Step 50, which is the transmitter search*) ;

a transmitter search unit for carrying out an transmitting frequency search over all receivable frequencies within the predetermined frequency ranges stored in the memory (*the apparatus sweeps a predetermined RF range and searches for signals within this range, paragraph [0029] wherein the ranges values are stored in the memory, paragraph [0035] and are determined prior to the scanning or searching of the frequencies, step 40 prior to Step 50, Fig. 3. Furthermore defines the spectrum range of detection is any possible range for which the receiver is capable of detecting, paragraph [0036]*);

a switch unit for enabling the transmitter search (*to operate the device, a user depresses or toggles the power switch, which boots the microcontroller 19 and set the spectrum range for the receiver to detected transmitted frequencies, paragraph [0040] which is the first step, step 48, of the method of detecting frequencies in a range or a transmitter search, Fig. 3*).

Burke does not appear to explicitly disclose a latch-in unit for latching in a received infrared transmitter, wherein the applicant discloses in the specification that the lath-in unit stores the ascertained modulation frequency at which recognition has occurred, paragraph [0017] of applicant's specification. However, Volkel discloses a radio receiver (*Fig. 1*) where the detected transmission frequency of the station into which the receiver stage 2 is currently tuned, is stored in the memory of stage 10 (*Col. 5, lines 38-41*) which creates a database of stations which can be received by the receiver (*Col. 5, lines 44-48*). Burke and Volkel are analogous art because they are from the same field of endeavor, wireless communication receivers. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Burke and Volkel before him or her, to modify the receiver of

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Burke to include the storing the detected transmission frequency of a station to a database of Volkel because the create of this database being stored in the memory is at the disposal of the user of the receiver to make a selection via the operating element (*Col. 5, lines 54-58*) allowing for stations to be reproduced(*Abstract*) without extra scan tuning.

Burke and Volkel do not appear to explicitly disclose steps that take places in infrared. Rather the apparatus disclosed by Burke and Volkel operates with the carrier wave gin a radio frequency wave. However, Burke discloses in the background that it is well know in the art that the carrier wave can be a radio frequency (RF), infrared light (IR), and Bluetooth among many others, paragraph [0003]. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Burke before him or her, to modify the apparatus and method of Burke and Volkel to be modified to operate with IR instead of RF because it is well known in the art to transmit signals along IR waves.

Re Claim 16, Burke discloses all the components of claim 13, which claim 16 is dependent upon. Furthermore, Burke discloses a display unit (*Burke includes a display such as an LED or liquid crystals display for indicating the detection of a frequencies, paragraph [0017]*). Burke does not explicitly disclose a display unit for displaying the infrared transmitters detected by the transmitter search. However, Volkel discloses a radio receiver with a display element for displaying information about at least the desired station (*Col. 1, lines 6-22*). The station is equivalent to the transmitters that are detected. Testani and Volkel are analogous art because they are from the same field of endeavor, wireless communication. At the time of the invention, it would have been obvious to one of ordinary

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skill in the art, having the teachings of Testani and Volkel before him or her, to modify the receiver of Testani to include a display element for displaying information about at least the desired station of Testani because it will allow the user to be aware of the station information. Furthermore, at the time of the invention, it would have been obvious for one of ordinary skill in the art, to apply this teaching and have the display all of the received transmitters or stations in the display rather than just the desired station because what can be done to one received station can be applied to all receive stations.

7. Claims 17, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke and Volkel as applied to claim 16 above, and further in view of Testani et al (herein Testani) US Patent 5,852,506.

Re Claim 17, Burke and Volkel disclose all the components of claim 16, which claim 17 is dependent upon. However, Burke and Volkel do not disclose a code evaluation unit for associating a detected infrared transmitter with a predetermined application. However, Testani does disclose that channels can be allocated to a predetermined application, such a different language, Col. 16, line 67 to Col. 17, line 2. The receiver switches to the channel with the language of choice selected by the user and stored, Col. 17, lines 2-14. In order to select or switch to the channel containing the language selected by the user, it would have been obvious at the time of the invention for one of ordinary skill in the art to select the channel associated with the language because each channel is transmitting a different language and the receiver knows the selected language. Selection of the appropriate channel is based on the

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command signal, Col. 4, lines 45-48, and the data processing section 54 decodes command information, Col. 4, lines 51-55. Therefore, the data processor evaluates or decodes the command signal, which is equivalent to the code, and is able to select the appropriate channel for the receiver by associating the selected channel with the a selected language, which is a predetermined application of the channel. Burke and Testani are analogous art because they are from the same field of endeavor, wireless communications. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Burke and Testani before him or her, to modify the wireless receiving apparatus of Burke to include the code evaluation unit of Testani because it would allow for the user to identifying the type of data being transmitted.

Re Claim 20, Burke and Volkel disclose all the elements of claim 13, which claim 20 is dependent upon. However, Burke and Volkel do not disclose an interpretation and conference system comprising a plurality of infrared headphones/hearing aids; and a plurality of infrared transmitters for transmitting infrared signals at specific frequencies. However, Testani discloses an interpretation and conference system comprising a plurality of infrared headphones/hearing aids (*Testani disclosed that the system for communication with multiple users in a defined zone, Col 1 lines 57-59, where a mobile receiver is associated with each of the users, Col. 1 lines 63-65, wherein the receivers are in headsets was but the listeners or users, Col 4, lines 5-6. Therefore, if there is a headset associated with each user, and a multiple users, then there exists multiple receivers*); and a plurality of infrared transmitters for transmitting infrared signals at specific frequencies (*a transmitter is provided*

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in a defined zone which has multiple programmed channel, each for transmitting programs comprised of programmed information and also a command channel for transmitting command information, Col 1, lines 59-63. Since there exists plurality of zones, there exists a plurality of transmitters, Fig. 1). Burke, Volkel, and Testani are analogous art because they are from the same field of endeavor, RF wireless communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Burke and Volkel, and Testani before him or her, to modify the apparatus of Burke and Volkel to be include the headset and system of Testani because it allows for the transmission on information to a plurality of user simultaneously throughout a predetermined area.

Burke and Volkel, and Testani do not appear to explicitly disclose steps that take places in infrared. Rather the apparatus disclosed by Burke and Volkel, and Testani operates with the carrier wave gin a radio frequency wave. However, Burke discloses in the background that it is well know in the art that the carrier wave can be a radio frequency (RF), infrared light (IR), and Bluetooth among many others, paragraph [0003]. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Burke before him or her, to modify the apparatus and method of Burke and Volkel, and Testani and Volkel to be modified to operate with IR instead of RF because it is well known in the art to transmit signals along IR waves.

Re claim 21, Burke and Volkel, and Testani disclose all the elements of claim 20, which claim 21 is dependent upon. Furthermore, Testani discloses the transmitter adds to the infrared signal a specific code corresponding to the specific frequency of the infrared signal

(the infrared receiver 52 receives audio on multiple channels and data. The data is encoded within the sync signal through pulse width modulation, where the widths of the pulses define the various commands. These various command define the channel over which the audio is being transmitted, Abstract. The data is that received by the receiver was encoded, therefore it naturally flows that it was the transmitter that encoded or added the data to the signal. Furthermore, this data contains command that define the channel, which is equivalent to the specific frequency of the audio signal, which is part of the original signal).

Re claim 22, Burke and Volkel, and Testani disclose all the elements of claim 20, which claim 22 is dependent upon. Furthermore, Testani discloses a means for personalizing an infrared headphone *(a two way transmission embodiment of the headset that contains a transmitter 684, Fig. 14, which allows for ID information to be transmitted to the transmitter with additional configuration information, such as the channel on which information is to be received, Col. 18, lines 47-56)*. Testani does not explicitly disclose a mobile terminal comprising: an infrared receiver for receiving signals; a memory for storing predetermined frequency ranges; and a transmitting frequency search with the predetermined frequency ranges stored in the memory; or an infrared receiving unit comprising: an infrared receiver for receiving signals ; a memory for storing predetermined frequency ranges; and a transmitting frequency search with the predetermined frequency ranges stored in the memory. However, all those elements are rejected and found in claim 13 by Burke who is further included in the combination of claim 20, which claim 22 is dependent upon, and therefore included in the rejection of claim 22. At the time of the invention, it would have been obvious to one of ordinary skill in the

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art, having the teachings of Burke and Volkel, and Testani before him or her, to further modify the receiver of Testani to include the transmitter in the headset of a Testani's two way embodiment because it enables a security mode, allowing one or certain individuals to have unique access to a particular channel in a zone (*col. 18, lines 56-59*), allowing for further personalization and a broader audience.

8. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke and Volkel, and Testani as applied to claims 20-23 above, and further in view of Mori et al (herein Mori) US Patent 6,209,127 B1.

Re claims 23-25, over Burke and Volkel, and Testani disclose all the elements of claim 20-22, which claims 23-25 is dependent upon. Burke and Volkel, and Testani do not appear to explicitly disclose means for transmitting an operating and/or processing program to a receiving unit comprising an infrared receiver for receiving signals, a memory for storing predetermined frequency ranges and a transmitting frequency search with the predetermined frequency ranges stored in the memory. However, Mori discloses a terminal device using a wireless communication medium that is capable of remote downloading a loader program (*Col. 1, lines 9-14*). Testani and Mori are analogous art because they are from the same field of endeavor, wireless communication devices. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Testani and Mori before him or her, to modify the receiver of Testani to include the capability of remote downloading of Mori because in order to uniformly upgrade software modules in each

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terminal device, it is necessary for a host station to transmit a new version of the software modules to each terminal device via a communication medium (*Col. 1, lines 33-36*). Since the communication medium is wireless, the downloading is remote.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANYA NGO whose telephone number is (571) 270-7488.

The examiner can normally be reached on M - F from 9 am - 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ngo/

March 15, 2010

/Kenneth N Vanderpuye/

Supervisory Patent Examiner, Art Unit 2613